

REMARKS

Claims 1 and 3-20 are currently pending in the patent application. The Examiner has rejected Claims 1 and 3-20 under 35 USC 103 as unpatentable over the teachings of the Kenner patent (hereinafter "Kenner") in view of Scott. For the reasons set forth below, Applicants believe that the claims as amended are definite and are patentable over the cited art.

In response to the rejection under 35 USC 103, Applicants respectfully request reconsideration of the rejection. The present invention is directed to a system, method, and program storage device for providing load balancing among a plurality of mirror servers dynamically during a user session with a web site. When a user at a client machine contacts a web site, the web page and a predetermined script are transmitted to the client. The predetermined script is automatically executed at the client to establish connections with each of the plurality of mirror servers which are associated with the web page and which can serve the client's request. As the connections are established between the client and each of the mirror servers, the response times are measured. The client selects the mirror server with the most favorable response

time as the selected mirror server to handle the user's next request during that session. The "load balancing" is done at the client location by evaluating the response times, which are assumed to be a function of current workload of the servers. The user's next action during that session will be sent to the mirror server selected as the fastest. Accordingly, the present invention provides client-side "load balancing" by selecting the fastest server and sending the next request/action to that selected server.

The Kenner patent is directed to server-side optimization of data delivery on a distributed computer network. Kenner provides a plurality of mirror servers, each of which is capable of responding to a client's request for data delivery. Each client is provided with software which includes a configuration utility and a client program. "The configuration utility is used first to determine which delivery sites provide improved performance for that particular user" (Col. 5, lines 39-43). Tests are run and the test results are provided to the service provider's database (Col. 5, lines 57-60). Thereafter the delivery site chosen by the configuration utility is used by that user for the retrieval of content managed by the delivery system service provider (Col. 5, lines 61-63).

Kenner teaches that a server selection is made in advance as to which delivery site/mirror server will handle a client's requests. The determination is made prior to the client making any requests. Kenner expressly states that "the configuration utility 34 must be run by the user...before the user terminal 12 will have access to the system" (Col. 8, lines 37-41). Clearly Kenner is neither teaching nor suggesting that a server be dynamically selected during a session to handle the next action within that session. Kenner does not teach that the determination is made each time in response to the client accessing the web page. Rather, Kenner's client must execute the configuration utility prior to joining the system and prior to issuing any client requests.

Applicants further note that Kenner does not teach or suggest that the configuration utility be downloaded upon access to a web site in response to a user request to browse that web site. Rather, Kenner requires that the configuration utility be run before the user terminal will have access to the system (Col. 8, lines 37-41). While Kenner does teach that the configuration utility can be downloaded from the MSP server, Kenner neither teaches nor suggests that the configuration utility be downloaded for

each session upon access to a web site in response to a user request to browse the web site.

Applicants respectfully assert that the Kenner patent does not obviate the invention as claimed. As is expressly recited in the independent claims, the present invention provides steps and means for transmitting the web page and the predetermined script "when said web page is accessed by a client in response to user input to establish a session" (Claims 1-10 and 20) and "in response to user input to establish a session to browse said web site" (Claims 11-19). Further, the claims recite selecting a mirror server to handle the next user action during the session. Kenner does not teach or suggest the claim features.

For a determination of obviousness, the prior art must teach or suggest all of the claim limitations. "All words in a claim must be considered in judging the patentability of that claim against the prior art" (In re Wilson, 424 F. 2d 1382, 1385, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970)). If the cited references fail to teach each and every one of the claim limitations, a *prima facie* case of obviousness has not been established by the Examiner. Since Kenner does not teach steps and means for transmitting the web page and the predetermined script "when said web page is accessed by a client in response to user input to establish a session"

(Claims 1, 3-10 and 20) and "in response to user input to establish a session to browse said web site" (Claims 11-19), and does not teach selecting a mirror server to handle the next user action during the session (Claims 1 and 3-20), it cannot be maintained that the claims are unpatentable over Kenner.

The Examiner has taken "official notice" of the fact that software can be downloaded through HTTP in a network. However, Applicants maintain that, even if one having skill in the art sought to modify Kenner by downloading software, the modified Kenner system would still not obviate the present invention since there is no teaching or suggestion of downloading software in a session to execute the software to select a server to handle the next request in the session.

The Examiner states that "Kenner does not explicitly cite that the selected mirror server fulfills the client's future requests during the session". The Examiner has newly cited the Scott patent for teaching that "once the load balancing procedure has assigned the client to a specific server...the client continues to communicate with only that assigned server for subsequent requests" citing Col. 4, lines 28-44. The cited passage teaches that a session ID accompanies subsequent page requests so that the requests

will be routed to the same server. Under Scott, every request goes to an HTTP server, which then routes the request using the session ID.

Applicants respectfully assert that routing requests through an HTTP server to a "responding server" using session IDs is not the same as having a connected responding server for a session.

Applicants note that one having skill in the art would not logically use the Scott session ID to modify the Kenner patent teachings. Since Kenner predetermines which server will handle **all** client requests, a session ID would be unnecessary and add undue complexity (with attendant time delay) to the Kenner approach. Moreover, even if one skilled in the art did modify Kenner with Scott, one would still not arrive at the present invention. Neither Kenner nor Scott teaches that executable script is downloaded to a client every time the client access a web page. Neither Kenner nor Scott teaches executing downloaded script at a client every time the client is accessing a web page in order to automatically select the server having the fastest current response time and then connecting the client to that selected server.

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed

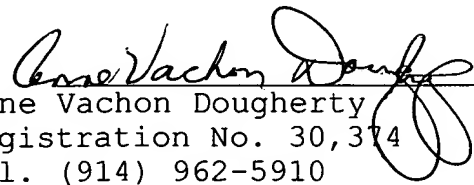
subject matter to a person of ordinary skill in the art. In re Bell, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). A proper *prima facie* case of obviousness cannot be established by combining the teachings of the prior art absent some teaching, incentive, or suggestion supporting the combination. In re Napier, 55 F.3d 610, 613, 34 U.S.P.Q.2d 1782, 1784 (Fed. Cir. 1995); In re Bond, 910 F.2d 831, 834, 15 U.S.P.Q.2d 1566, 1568 (Fed. Cir. 1990). Since there is no motivation to combine Kenner and Scott; and further since neither Kenner nor Scott teaches the claim features; and finally since a combination of the teaching would not obviate the invention, it cannot be concluded that the claims are unpatentable in view of Kenner and Scott.

Based on the foregoing amendments and remarks, Applicants respectfully request entry of the amendments, reconsideration of the amended claim language in light of the remarks, withdrawal of the rejections, and allowance of the claims.

Respectfully submitted,

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